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4 DEVELOPMENT OF COMMUNICATIVE SOFT SKILLS UNDER CONDITIONS OF EDUCATION DIGITAL TRANSFORMATION

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ABSTRACT

The digital transformation of education emphasizes the importance of developing communication skills among students of higher education institutions to ensure effective interaction in technologically mediated contexts. The growing importance of online communication, the volume of information and changes in models of social interaction create new requirements for emotional regulation, social perception, reflexivity and maintaining a constructive style of interaction in the digital environment. In this context, the development of communicative soft skills is especially important to ensure flexibility of behavior, responsibility for one's own communicative decisions and readiness to adapt to dynamic formats of cooperation.

The study presents an approach to the development of the communicative competence of applicants based on a combination of emotional-reflective mechanisms and modern educational technologies. Empirical results showed a positive dynamics in terms of emotional intelligence and communicative reflection, which indicates the formation of a more conscious and adaptive style of digital interaction. The identified correlations between emotional and reflective components confirm the systemic nature of communicative development and the importance of targeted work with the indicated psychological determinants. The obtained data can be used to improve educational programs aimed at preparing future specialists for effective activity in the conditions of digital communication and multi-format interaction.

KEYWORDS

Soft skills; digital communication; emotional intelligence; communicative reflection; personality, social perception; self-regulation; higher education students.

4.1 COMMUNICATIVE SOFT SKILLS AS A COMPONENT OF PROFESSIONAL COMPETENCE UNDER CONDITIONS OF EDUCATION DIGITALIZATION

The rapid development of digital technologies has reformatted the way the educational process is organized much more deeply than the previous stages of modernization. If earlier innovations concerned mainly the content of education, today the very logic of interaction between participants in the educational environment is changing. Universities are increasingly working in the format of distance or blended learning, using multimedia resources, interactive platforms and mobile services. As a result, students find themselves in an environment where communication becomes more fragmented, flexible, and its speed and tools determine the quality of educational activities.

As modern research shows, the introduction of distance learning formats affects not only the assimilation of content, but also how students' communicative and information skills are formed [1]. In the conditions of digital channels of interaction, the burden on self-regulation and the ability to structure information, maintain productive contact and quickly adapt to changes in the format of communication is increasing. The fact that digital interaction is constantly moving between formal and informal planes places new demands on students. They need not only to understand the content of the educational material, but also to be able to briefly, reasonedly and correctly express their position, negotiate, overcome misunderstandings, work in online teams. This is confirmed by the results of research on the development of soft skills in blended learning, which demonstrate a noticeable increase in the role of communicative competencies [2].

Therefore, the education digital transformation significantly changes the idea of modern professional training. It is not limited to updating tools or training platforms, but also affects the very content of competencies that are important for a specialist today. Communicative skills occupy a central place among them, as they determine the ability of a future specialist to act effectively in conditions of information overload, hybrid work formats and rapid changes in technological environments.

One of the key elements is social intelligence, which determines the quality of interpreting the intentions, emotions and reactions of other people. Its importance increases in the conditions of digital interaction, where some non-verbal signals disappear, and the risk of misunderstandings increases [4]. Social intelligence helps to navigate multitasking and rapidly changing conditions of the communicative space. An equally important component is communicative creativity. It involves the ability to find new ways of expressing thoughts and building a dialogue, which becomes especially important in situations where standard interaction scenarios do not work. Creativity in communication is associated with flexibility of thinking, the ability to combine different styles and techniques, as well as the ability to find constructive solutions in conflict or uncertain situations. The third important component is emotional stability, which determines the ability to maintain constructiveness in situations of excessive information overload, rapid changes or interpersonal tension. Research in the field of digital learning shows that emotional resilience is one of the factors that determine the level of inclusion and effectiveness of students' interaction in the online environment [5]. These and other components together form the foundation of communicative competence, which is a necessary condition for successful professional activity in an information-rich environment.

The coordinated development of these components significantly increases a person's ability to communicate effectively, contributes to the formation of professional flexibility and strengthens the competitive advantages of a specialist [6]. In this sense, communicative soft skills are not secondary, but system-forming characteristics that determine the quality of professional interaction in the digital era.

In the modern digital society, communicative competence is increasingly defined as one of the leading characteristics of professional maturity. If earlier the ability to communicate effectively was considered a valuable but optional skill, today it is becoming a key indicator of a specialist's readiness to work in a dynamic, technological environment. This is because digital interaction formats are changing the structure of work processes: work in teams becomes more distributed, and decisions are often made in conditions of incomplete information or rapidly changing circumstances.

Research in the field of digital education confirms that the communicative competence level of students directly affects the ability to act in virtual team configurations, coordinate activities and maintain productive information exchange [7]. In hybrid teams, skills related to setting up communication channels, maintaining emotional connection with colleagues and forming a transparent communicative climate are especially valued, regardless of whether the interaction takes place in physical or digital space.

In this context, employers emphasize the growing importance of the ability to work in a team, resolve conflicts, argue a position and coordinate the interests of different parties. Studies of various models of hybrid employment demonstrate that it is communicative skills that ensure the coherence of actions in the team and contribute to the formation of sustainable work dynamics [8]. Where there is no clear emotional feedback, which is usually provided by offline interaction, empathy, attention to the context and the ability to predict possible reactions of the interlocutor become especially important.

From a psychological point of view, communicative competence encompasses aspects such as the ability to empathize, active listening, role flexibility, and effective self-presentation [9]. These qualities provide the opportunity to establish a positive psychological climate in the team, contribute to the emergence of trust, and reduce the risk of conflicts. Stress tolerance deserves special attention, which significantly affects the quality of communication in conditions of increased information load. Research in the field of communication management shows that the ability to maintain clarity of thought, keep an optimal level of emotional tone, and avoid impulsive decisions is an important component of professional competence in highly dynamic work environments [10].

Thus, communicative competence can be considered as an integrative formation that combines cognitive, emotional and behavioral resources of the individual. It ensures not only the effectiveness of professional activity, but also the ability to form constructive relationships, maintain psychological balance and act responsibly in the conditions of digital transformations.

The active introduction of digital technologies into the higher education system is radically changing not only the organizational forms of learning, but also the very nature of communication between its participants. The educational process increasingly combines synchronous and asynchronous formats, multimedia resources, online platforms for collaboration and feedback services. As a result, students and teachers find themselves in an environment where communication channels are branching out, and interaction requires a new culture of using digital tools.

As evidenced by modern research, online learning creates not only new opportunities, but also a number of challenges associated with increased cognitive load, fragmentation of attention, and a decrease in the number of nonverbal signals that provide emotional information in ordinary communication [11]. In such conditions, the risk of communicative misunderstandings increases significantly, since the digital environment often does not allow for a quick response to nonverbal changes or intonation nuances that are natural in face-to-face communication.

At the same time, digitalization opens up broad prospects for the development of communicative soft skills. Interactive platforms allow organizing work in groups even in the absence of physical presence; asynchronous channels (forum, chat, video messages) form new models of exchanging ideas; multimodal materials expand the possibilities of self-expression; rapid feedback tools help coordinate joint actions more

quickly. Thus, digital technologies not only complicate communication, but also create an environment that stimulates the development of flexibility, responsibility, the ability to plan interaction and solve problems in conditions of information uncertainty.

An important aspect is also psychological stability in distance interaction. Research in the field of psychological and pedagogical support of distance learning emphasizes the need to form emotional self-regulation skills, awareness of one's own communicative limits, and the ability to maintain motivation in remoteness conditions [12]. Maintaining psychological balance helps reduce conflict, improves the quality of interaction and makes communication processes more predictable.

Equally important is the issue of adapting the content of educational programs to new realities. The formation of communicative competence in a distance environment requires focused work on developing the ability to clearly formulate questions, convey content, argue a position and adhere to ethical norms of digital communication [13]. All this reinforces the need to revise methodological approaches and actualizes the task of integrating digital communicative practices into the curricula of higher education institutions.

The training of higher education students in the context of digitalization is increasingly focused on the formation of not only narrow professional knowledge, but also broader competencies that ensure success in various socio-professional situations. In this context, communicative soft skills occupy a special place, since they determine the ability of a future specialist to interact with others, adapt to environmental changes and solve problems that go beyond purely technical or special skills.

The results of numerous studies confirm that it is communicative skills that affect the level of academic and professional success of students, the formation of professional identity and the ability to effectively cooperate in communicatively complex conditions [14]. In situations where interaction occurs mainly through digital channels, the need for the ability to accurately convey content, correctly interpret the interlocutor's answers, as well as maintain communicative balance in conditions of a lack of non-verbal signals increases.

No less important is the aspect of graduates' competitiveness. The labor market is actively changing: more and more companies are looking for specialists who are able to work in multicultural environments, participate in project teams, negotiate, present results and justify decisions. Research in the field of professional training indicates that the presence of developed soft skills significantly increases the success of young specialists in adapting to the requirements of the modern economy and contributes to faster professional growth [15].

Modern research proves that a high level of communication skills is associated with the ability to effectively resolve conflict situations, carry out self-presentation, build constructive relationships and make agreed decisions. All these aspects become critically important in the context of digital transformation, where communication increasingly takes place in a virtual format, and the requirements for the speed and accuracy of information exchange are increasing.

Thus, the development of communicative soft skills in the higher education system is becoming a strategic task. It is not just about improving individual skills, but about the formation of holistic competence that helps students navigate in a complex digital environment, build constructive relationships and adequately respond to professional challenges. In the future, it is these qualities that ensure the readiness

of young specialists to act responsibly, predictably and effectively in conditions of rapid technological and social transformations.

4.2 PSYCHOLOGICAL MECHANISMS AND DETERMINANTS OF THE DEVELOPMENT OF COMMUNICATION SKILLS IN THE DIGITAL EDUCATIONAL ENVIRONMENT

The digital educational environment, which today encompasses both academic and professional training of higher education students, significantly changes the conditions for the formation of communication skills. Unlike traditional classroom formats, where interpersonal interaction was based on a complex of non-verbal signals, intonations, spatial behavior and dynamics of group contact, digital interaction mainly focuses on textual, audiovisual and multimodal channels. This causes a restructuring of the psychological mechanisms that ensure the formation and implementation of communicative competence.

One of the key mechanisms is social perception, which provides the ability to interpret the intentions, emotions and reactions of another person. In the digital format, this ability is subject to certain limitations, since the number of non-verbal signals that usually help in understanding another person is significantly reduced. That is why the role of cognitive processes in virtual interaction is enhanced: it is necessary to analyze the context more carefully, make assumptions about the motives of the communication partner, and assess possible risks of misunderstanding. Research emphasizes that in such conditions the importance of certain aspects of social perception increases, including the ability to read indirect signals and interpret them in situations of limited non-verbal information [16].

The second important psychological mechanism is emotional regulation, which in digital interaction acquires new semantic nuances. The features of online interaction create situations, in which the usual methods of emotional support and social feedback are significantly limited. When communication occurs through screens, participants are deprived of a significant part of non-verbal signals that usually help to navigate the emotional state of the interlocutor. This can lead to difficulties in maintaining internal balance, increased sensitivity to delays in response, ambiguous formulations or information overload. In such conditions, the ability to be aware of one's own emotional reactions, to correct them in a timely manner and to maintain the constructiveness of interaction even when the communicative situation is uncertain becomes of particular importance. Studies devoted to the impact of digital communication on emotional processes emphasize: the effectiveness of online interaction largely depends on a person's ability to maintain emotional stability and flexibly adapt to changes in the dynamics of communication [17].

The third core of psychological mechanisms is communicative reflection, which acts as the ability to analyze one's own interaction models, evaluate their effectiveness, and rethink ways of influencing the interlocutor. In the digital environment, this ability acquires particular importance, since online communication is often characterized by fragmentation, rapid changes in context, and ambiguity of feedback. Under such conditions, reflection helps participants in interaction not only to better understand their own communicative reactions, but also to consciously adjust behavior, choose more appropriate forms of expression, and maintain a constructive nature of dialogue. Studies devoted to the role of reflective practices in digital

education emphasize that it is the ability to critically analyze one's own interaction that contributes to the formation of mature communicative models and better adaptation to technologically mediated communication formats [18].

The fourth group of mechanisms are motivational determinants that regulate the readiness of the applicant to engage in communicative activity. In the digital environment, motivation is often formed due to internal mechanisms, in particular self-organization, responsibility for the result and awareness of one's own educational and professional goals. When interaction is carried out mainly online and is not accompanied by constant external support, it is internal motivation that becomes a source of sustainable involvement and readiness to maintain a productive dialogue. For the development of communicative soft skills, it is important that the student not only master techniques or behavioral models, but also understand why he/she needs them and how they affect his/her professional future. Research in the field of emotional and motivational mechanisms for the development of soft skills emphasizes that internal interest, formed value orientations and a sense of personal significance of learning are among the key conditions for the growth of applicants' communicative competence [19].

The dynamics of the development of communicative skills in the digital environment also depends on the extent, to which the individual is able to integrate the acquired experience into his/her own system of meanings and value orientations. After all, digital interaction involves not only a technological environment, but also a space, in which students learn to build professional roles, maintain academic initiative and choose effective interaction strategies. That is why the key factor is the ability to consciously combine cognitive, emotional and behavioral components of the communicative process. The integration of these mechanisms forms stable communicative patterns that can be reproduced in various educational and professional situations, in particular in conditions of rapid technological change.

It is also important to consider that the digital environment not only creates new challenges, but also opens up additional opportunities for the development of communicative competence. Interactive tools, multimodal interaction formats and the possibility of asynchronous messaging expand the space for reflection, self-expression and experimentation with ways of presenting one's own position. For many higher education students, online formats are becoming the environment where they can more safely try out new behavior patterns, train their ability to argue, listen, and clarify their partner's message. In this sense, digital communication acts not only as a context that complicates the learning process, but also as a resource that enhances the ability of future professionals to adapt to multi-level and technologically saturated professional realities.

Summarizing the above, it can be stated that the digital educational environment significantly transforms the conditions, in which the communicative skills of higher education students are formed. The transition to textual, audiovisual and multimodal formats of interaction changes not only the method of information transmission, but also the very structure of psychological processes that ensure effective communication. Social perception, emotional regulation, communicative reflection and motivational determinants form an interconnected system of mechanisms that determine the quality and effectiveness of interaction in conditions of digital limitations and opportunities.

Each of these mechanisms performs its own function: social perception helps to compensate for the lack of non-verbal signals; emotional regulation supports internal stability in fragmentary and often

ambiguous communicative situations; reflection provides rethinking and correction of one's own communicative actions; motivation forms readiness for active and responsible interaction. Together, they create the basis for the formation of mature communicative competence, which is a necessary condition for the success of a future specialist in an information-rich, technologically mediated educational environment.

Taking into account these mechanisms allows not only to understand the nature of digital communication more deeply, but also to form programs for the development of communicative soft skills that meet modern challenges and real needs of students. The logic of digital interaction involves the use of such educational solutions that do not simply transmit information, but create conditions for active training of social perception, emotional regulation, reflective skills and internal motivation. That is why the following presentation focuses on presenting a comprehensive program for the development of communicative soft skills in a digital educational environment.

4.3 PROGRAM FOR THE DEVELOPMENT OF COMMUNICATIVE SOFT SKILLS IN THE DIGITAL EDUCATIONAL ENVIRONMENT

The development of a program for the development of communicative soft skills is based on a combination of classical psychological principles and modern approaches focused on the specifics of digital interaction. Communication in an educational environment is considered not only as an exchange of information, but as a multidimensional process of social interaction, in which cognitive, emotional and motivational mechanisms are activated. Therefore, the conceptual basis of the program includes the provisions of the social-cognitive approach (A. Bandura, S. Asch, D. Kahneman, A. Tversky, W. Mischel) humanistic psychology (C. Rogers, A. Maslow, R. May, V. Panok, T. Yatsenko), activity theory (G. Kostyuk, V. Roments) and modern models of digital communicative behavior (J. Walther, S. Turkle, B. Wellman, N. Carr).

One of the key theoretical pillars is the social-cognitive approach, according to which communicative skills are formed through the interaction of cognitive processes, social context and experience of interpersonal behavior [20]. In the digital environment, this interaction acquires new characteristics: students are forced to adapt to the fragmentation of information flows, multi-channel interaction and the indirectness of social signals. An important conceptual component is the position of humanistic psychology, which emphasizes the ability of the individual to self-development, reflection and conscious interaction with other people [21]. This approach emphasizes the importance of developing empathy, openness, subjectivity and responsibility for the quality of one's own communication. The activity approach is also of conceptual importance, according to which any skill is formed through dynamic participation in activities, gradual complication of tasks and reflection on the experience gained [22]. Modern approaches to the study of digital communication emphasize that the effectiveness of interaction is determined not only by speech and social skills, but also by the ability to manage one's own emotional response, optimally use the capabilities of digital platforms, and maintain motivational engagement [23]. These aspects are directly related to the psychological mechanisms outlined in the previous section: social perception, emotional regulation, communicative reflection, and motivational determinants of interaction.

Thus, the conceptual framework of the program combines fundamental psychological theories and innovative approaches to supporting communicative development in digital education. This allows students to form a holistic set of competencies adapted to the modern requirements of the professional environment and the peculiarities of interaction in the digital age.

The program for the development of communicative soft skills in a digital educational environment is aimed at forming in higher education students a holistic complex of communicative competencies necessary for effective interaction in modern conditions of technologically mediated communication. The structure of the program is built on the principle of consistent deployment of psychological mechanisms of communicative interaction, which is reflected in four content modules. Each module focuses on a certain component of communicative competence, while providing the opportunity to integrate the acquired skills into more complex forms of digital interaction.

The first module is aimed at the development of social perception in a digital environment. Its content concerns understanding the specifics of online communication, in particular, the limitations of the non-verbal channel, the ambiguity of text messages and the peculiarities of interpreting visual-multimodal signals. The module forms the ability to assess the communicative situation, analyze the intentions of the interlocutor and foresee possible risks of misunderstanding. The module uses tasks that simulate typical situations of digital interaction: analysis of fragments of online dialogues with different variants of intonation and semantic coloring; comparison of alternative interpretations of the same message; identification of hidden emotional or behavioral intentions based on limited verbal and visual signs; reconstruction of the communicative context based on incomplete information.

The second module is devoted to emotional regulation and resilience in digital formats of interaction. It reveals the peculiarities of the emergence of emotional reactions in conditions of asynchrony, fragmentation and information overload. The central task is to form the ability to maintain emotional balance, manage tension, adapt to uncertainty and keep communication productivity regardless of the context of digital exchange. In view of this, tasks aimed at awareness and correction of emotional reactions in a digital context are integrated into the content of the module. In particular, students work with examples of online communications, in which ambiguity or delay in response is intentionally modeled, analyze their own first emotional impulses and carry out their cognitive reassessment. The module also includes exercises on identifying "triggers" of digital stress, building individual maps of emotional response, identifying moments of information overload and finding alternative self-regulation strategies. Additionally, the technique of reconstructing the emotional tone of online dialogue using a minimum of verbal and non-verbal markers is used, which allows developing sensitivity to the hidden emotional dynamics of digital interactions.

The third module focuses on the development of communicative reflection as a tool for self-correction and conscious interaction. Within this block, students analyze their own communicative strategies, identify typical response patterns, track difficulties and strengths in various formats of digital communication. Reflective practices contribute to rethinking routine behaviors, forming alternative solutions, and increasing personal flexibility in communicative situations. In particular, students work with the reconstruction of their own typical behavioral strategies in digital dialogues, compare expected and actual interaction results, and form individual profiles of communicative reactions. The modular complex includes tasks for describing

situational experiences, within which participants analyze the causes of misunderstandings in virtual communities, determine the stages of the emergence of communication barriers, and model alternative ways of responding.

The fourth module integrates the results of the previous blocks and is aimed at developing practical digital communication skills relevant to professional interaction. The focus is on the ability to build reasoned messages, present information in a multimodal format, work effectively in digital teams, engage in ethical and constructive interaction, provide and receive feedback. The module involves working with complex communication scenarios that require rapid adaptation, coordination of actions, and a responsible attitude to digital behavior. Of particular importance is the implementation of teamwork simulations in digital environments, where participants play the roles of moderators, analysts, or decision generators, coordinating actions in real time. Such exercises allow you to practice the ability to quickly adapt a communication strategy, maintain transparency of the discussion, and ensure effective distribution of responsibility in the team. The final element of the module is a feedback exercise, where students analyze the strengths and problems of interaction, carry out self- and mutual evaluation of communicative actions, which strengthens the skills of constructive assessment and increases reflective accuracy. The combination of these tasks contributes to the formation of sustainable digital communicative competencies that ensure the effectiveness of professional activity in the conditions of increasing digitalization.

To summarize the logic of the program implementation and systematize its key components, the content of each module was structured according to the leading psychological mechanisms relevant to digital interaction. **Table 4.1** summarizes the structure of the program for the development of communicative soft skills in the digital educational environment.

Table 4.1 Program for the development of communicative soft skills in the digital educational environment

Module	Content focus	Key technological elements (exercises, techniques)
Social perception	Understanding the features of digital communication, interpreting multimodal signals	Analysis of fragments of online dialogues; comparison of different interpretations of one message; identification of hidden intentions based on a minimum of signals; reconstruction of the context with incomplete information
Emotional regulation	Managing emotional states in the context of online interaction and information overload	Analysis of emotional impulses and cognitive reappraisal; identification of individual "triggers" of digital stress; construction of a map of emotional reactions; reconstruction of the emotional tone of the dialogue based on a minimum of markers
Communicative reflection	Awareness and analysis of individual digital communication strategies	Reconstruction of typical strategies of digital interaction; comparison of expected and real results; creation of individual profiles of communicative reactions; reflexive commenting on fragments of one's own online communication
Practical digital communication	Developing professionally oriented digital interaction skills	Construction of reasoned digital messages; multimedia presentations; simulations of teamwork; analysis of violations of digital etiquette; reflexive feedback

The generalized structure of the program demonstrates the correspondence between the psychological mechanisms of communicative interaction and the tools of their targeted development. The presented modules contain basic methods and exercises that ensure the gradual complication of communicative tasks and the formation of skills relevant to the digital educational environment.

4.4 EMPIRICAL VERIFICATION OF THE EFFECTIVENESS OF THE PROGRAM FOR THE DEVELOPMENT OF COMMUNICATIVE SKILLS OF HIGHER EDUCATION STUDENTS IN THE DIGITAL EDUCATIONAL ENVIRONMENT

The empirical verification of the effectiveness of the program was carried out through the analysis of the development dynamics of communicative skills under the influence of the implemented intervention. The study included two main stages: preliminary diagnostics, program implementation and re-measurement with subsequent comparison of the results obtained. This approach made it possible to determine what changes are associated with the use of the program, as well as to assess the degree of its impact on key psychological mechanisms of communication.

The empirical study was conducted during the 2024—2025 academic year on the basis of the educational laboratory of mental health, mentoring and mediation of the Semyon Kuznets Kharkiv National Economic University. The sample included 102 higher education applicants of 2—3 years of various educational programs. The age range of the participants was 18—21 years, which made it possible to obtain data representative for the analysis of the features of the emotional experience of student youth.

For empirical verification of the effectiveness of the program, a set of psychodiagnostic methods was used, covering key psychological mechanisms related to the development of communicative soft skills in the digital educational environment. The selection of methods was carried out in accordance with the psychological mechanisms defined in the theoretical model of the program.

The empirical research procedure involved the sequential implementation of three stages: preliminary diagnostics, implementation of a program for the development of communicative soft skills, and final measurement. At the first stage, students underwent a set of psychodiagnostic techniques aimed at assessing the level of emotional regulation, social perception, communicative reflection, and motivational determinants of interaction. The second stage included the systematic participation of applicants in a four-module program integrated into practical classes and extracurricular forms of work, which ensured the reproduction of real conditions of digital communication. The final stage involved the repeated application of the same set of techniques, which made it possible to trace the individual and group dynamics of indicators, determine the effectiveness of the program, and assess the changes caused by the influence of the targeted development of psychological mechanisms of communicative interaction in the digital environment.

For a comprehensive assessment of the emotional component of the communicative competence of applicants, N. Hall's method was used, which allows determining the development level of key aspects of emotional intelligence: emotional awareness, emotion management, self-motivation, empathy and the ability to recognize emotional signals of other people. Since it is these determinants that largely ensure the

effectiveness of digital interaction, their dynamics are an important indicator of the effectiveness of the program for the communicative soft skills development. The generalized results of measurements for all five scales and the integral indicator of emotional intelligence are given in **Table 4.2**.

Table 4.2 Dynamics of emotional intelligence indicators (N. Hall) before and after the program

Emotional intelligence scales	Before the program (M ± SD)	After the program (M ± SD)	Statistical significance
Emotional awareness	9.8 ± 4.1	12.6 ± 3.9	$p \leq 0.05$
Emotional management	8.7 ± 3.8	10.1 ± 3.5	$p \geq 0.05$
Self-motivation	10.9 ± 4.0	13.4 ± 3.7	$p \leq 0.05$
Empathy	11.2 ± 3.9	14.1 ± 3.6	$p \leq 0.01$
Recognition of other people's emotions	10.4 ± 4.2	11.3 ± 4.0	$p \geq 0.05$
Integral level of emotional intelligence	51.0 ± 10.3	61.5 ± 9.8	$p \leq 0.01$

The results presented in **Table 4.2** demonstrate the positive dynamics of the development of individual components of the emotional intelligence of applicants after the program implementation. The most pronounced changes are observed in the scales of emotional awareness ($p \leq 0.05$), self-motivation ($p \leq 0.05$) and empathy ($p \leq 0.01$), which corresponds to the theoretically outlined tasks of forming emotional stability, sensitivity to the states of other people and the ability to volitional regulation in the digital environment. The deepening of these characteristics is natural, since they form the basis of constructive behavior in conditions of information overload, fragmentation of online communication and the need for accurate understanding of communicative signals.

Indicators related to managing one's own emotions and recognizing the emotions of others demonstrate a moderate increase without statistically significant differences ($p \geq 0.05$), which is typical for more stable emotional components that require longer psychological work and deeper reflective practices. At the same time, the integral level of emotional intelligence has a statistically significant increase ($p \leq 0.01$), which indicates a general strengthening of the emotional competence of applicants and confirms the effectiveness of the program in forming those determinants that ensure the success of communication in the digital educational environment.

To assess the level of applicants' awareness in the process of interpersonal and digital interaction, a questionnaire of communicative reflection (author's modification) was used, aimed at measuring the cognitive, emotional and behavioral components of reflective activity. The methodology allows you to determine the extent, to which a person is able to analyze own communicative actions, predict their possible consequences and adjust behavior in accordance with the context of interaction. The use of the questionnaire allows you to comprehensively assess the level of conscious participation in digital communication and identify changes caused by the action of the program for the development of communicative soft skills.

To determine changes in the awareness level of communicative behavior of higher education students, indicators were analyzed for three main components of communicative reflection: cognitive, emotional

and behavioral. Since it is the development of reflective skills that provides the ability to consciously respond, correct communicative strategies and adapt in the digital environment, the dynamics of these indicators is an important criterion for the effectiveness of the program. The summarized results are presented in **Table 4.3**.

Table 4.3 Dynamics of communicative reflection indicators before and after the program

Communicative reflection components	Before the program (M ± SD)	After the program (M ± SD)	Statistical significance
Cognitive reflection	14.2 ± 3.8	17.6 ± 3.5	$p \leq 0.05$
Emotional reflection	13.5 ± 4.0	16.9 ± 3.7	$p \leq 0.01$
Behavioral reflection	15.1 ± 3.6	16.3 ± 3.4	$p \geq 0.05$
Integral indicator of communication reflection	42.8 ± 8.2	50.8 ± 7.9	$p \leq 0.05$

The results presented in **Table 4.3** indicate a positive development dynamics of applicants' communicative reflection after the program implementation. The most significant changes were recorded in the indicators of emotional reflection ($p \leq 0.01$), which indicates an increase in the ability to be aware of one's own emotional states and their impact on the course of communication. A moderate but statistically significant increase is also observed in the cognitive component of reflection ($p \leq 0.05$), which reflects an improvement in applicants' ability to analyze their own communicative actions, interpret their causes and predict possible consequences. The indicator of behavioral reflection demonstrates a tendency to increase, but these changes do not reach statistical significance ($p \geq 0.05$), which is characteristic of more stable behavioral patterns that require longer interventions for significant modification. At the same time, the integral indicator of communicative reflection significantly increased ($p \leq 0.05$), which confirms the general strengthening of reflective competence and indicates the effectiveness of the program in forming conscious communicative behavior in the digital educational environment conditions.

For an in-depth study of the structure of the relationships between the components of emotional intelligence and communicative reflection, a correlation analysis was conducted, which made it possible to determine how coherently individual psychological mechanisms involved in digital communication develop. This allowed not only to confirm the effectiveness of the program at the level of individual indicators, but also to identify integral processes of their mutual reinforcement, which is important for understanding the complex nature of the communicative soft skills formation.

The correlation analysis confirmed the presence of systemic relationships between the components of emotional intelligence and communicative reflection. The strongest relationship was found between emotional awareness and emotional reflection ($r = 0.46$, $p \leq 0.01$), which indicates a consistent development of the ability to be aware of one's own emotional states and analyze their impact on communication. Significant relationships are also observed between self-motivation and cognitive reflection ($r = 0.50$, $p \leq 0.01$), which reveals the mutual reinforcement of volitional control of emotions and the analytical ability to evaluate one's own communicative actions. Empathy indicators have a positive relationship with emotional reflection ($r = 0.50$, $p \leq 0.01$), which emphasizes the importance of emotional sensitivity in the

process of reflective analysis of interaction. At the same time, the components of behavioral reflection form weaker, but correlations with the motivational and cognitive aspects of emotional intelligence ($r = 0.28—0.37$, $p \leq 0.05$) are significant, which corresponds to their greater stability and slower dynamics of change. The results obtained confirm that the development of emotional intelligence and reflective competence has an integrated nature and occurs as a cumulative reinforcement of interconnected psychological mechanisms.

The empirical data obtained allow a comprehensive assessment of the effectiveness of the program for the development of communicative soft skills in the digital educational environment and to trace its impact on the key psychological determinants of interaction. The analysis of the results according to the method of N. Hall showed a statistically significant increase in the indicators of emotional awareness, self-motivation and empathy, which indicates the formation of higher education students with greater emotional stability, the ability to more accurately identify emotional signals and more actively engage in emotional regulation in the conditions of digital communication. The data from the questionnaire on communicative reflection also showed an increase in the level of cognitive and emotional components of reflexivity, which is manifested in increased awareness of one's own communicative actions, the ability to predict their consequences and adjust behavior in accordance with situational requirements.

The correlation analysis conducted confirmed the interconnected nature of the studied components development. The identified connections between emotional awareness and emotional reflection, between self-motivation and cognitive reflection, as well as between empathy and emotional analysis of communicative situations indicate an integrated impact of the program on the holistic system of emotional-reflective support of digital interaction. At the same time, even moderate but stable correlations with behavioral aspects of reflection indicate the gradual formation of applicants' ability to adapt their own communicative patterns to the conditions of online interaction, which is important for modern professional activity.

Thus, the results of the study demonstrate that the proposed program contributes to the development of not only individual communicative skills, but also deeper psychological mechanisms that ensure the effectiveness of digital communication: emotional regulation, reflexivity, social sensitivity and motivational activity. The totality of the data obtained gives grounds to consider the program as a tool of comprehensive influence, capable of strengthening the adaptive resources of applicants and forming in them a stable readiness for effective interaction under conditions of education digital transformation.

4.5 DISCUSSION OF THE RESULTS OF SECTION 4

The obtained results allow us to take a different look at the development dynamics of communicative soft skills of students in the digital educational environment. First of all, it is worth noting that the growth of individual components of emotional intelligence (emotional awareness, self-motivation and empathy) is not a random or fragmentary phenomenon. On the contrary, their changes demonstrate an internal logic that fully corresponds to the psychological picture that was outlined in the theoretical section. Digital communication, which deprives participants of a significant part of non-verbal signals, places increased demands on the ability to quickly recognize emotional states and maintain internal stability. That is why the increase

in the level of emotional awareness in the study can be considered one of the key markers of adaptation to the digital format of interaction.

Changes in the structure of communicative reflection also turned out to be indicative. The increase in the cognitive and emotional components indicates that the participants began to understand their own communicative reactions, their causes and possible consequences more deeply. This result is consistent with modern ideas about reflexivity as a mechanism of professional and personal flexibility. At the same time, the behavioral component, despite the positive dynamics, turned out to be less sensitive. This is quite natural: changing stabilized communicative patterns requires more time and practical experience than forming awareness or emotional analysis of the situation. Therefore, the obtained indicators can be considered as only recording the initial stage of deeper transformations.

Additional understanding of the relationships between these indicators was provided by conducting a correlation analysis. The identified relationships between emotional awareness and emotional reflection, between self-motivation and cognitive analysis of communicative situations confirm that emotional-reflexive mechanisms do not work in isolation. Strengthening one component strengthens the others, forming a more holistic system of communicative competence. The relationship between empathy and emotional reflection attracts special attention: it is this pair of indicators in the digital context that becomes critically important, since it allows you to compensate for the loss of some of the social signals characteristic of online interaction.

Summarizing the results presented, it can be argued that the study outlined a holistic picture of the communicative soft skills development in the digital environment and identified the leading mechanisms that ensure this dynamic. The changes recorded in emotional intelligence and communicative reflection indicate the formation of a more adaptive style of interaction among higher education students, capable of relying on internal self-regulation, attentiveness to one's own experiences and analytical understanding of the situation. In a digital educational environment, where the intensity of communicative processes is constantly increasing, and the requirements for emotional and social competence are becoming higher and higher, such changes are of fundamental importance.

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